

Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Course name Radiation Chemistry

Course number AMSR2258

Faculty

Department

Course type Major Needs

Course level 2

Credit hours (theoretical) 2

Credit hours (practical) 0

Course Prerequisites

Course Objectives

- 1 he student will become familiar with venipuncture, contrast media use and interactions, sterile technique, history taking and basic pharmacology.
- 2 Review the contrast media in radiology and imaging
- 3 Understand the Intravenous Radiographic Contrast
- 4 Give a simple Guide to the Basics of Contrast Media

Intended Learning Outcomes

Knowledge and Understanding	* Contrast media preparation
	* Types of Contrast Media in Radiology Department
	 Contrast media and adverse reaction, imaging protocols, and appreciation of radiation dose factors will also be addressed
Professional Skills	* Adverse Effects of Contrast Media
General Skill	* Safety standards for contrast media injection

Course Contents

- 1 Types of Contrast Media
- 2 _ Mechanism of Contrast media; absorption and excretion
- 3 Techniques applied for contrast media
- 4 Contrast media safety preparation
- 5 Radio pharmaceutical contrast media
- 6 Nuclear medicine contrast media
- 7 _ Anatomical parts imaging and contrast media

Teaching and Learning Methods

- 1 Power point lectures
- 2 Lecture notes
- 3 seminars

Teaching and Learning Methods for the Disabled Students

1 - electronic lectures

Students Assessment

Assessment Method	<u>TIME</u>	<u>MARKS</u>
homewroks and attendence	all over the semester	30
midterm exam	the seventh week	30
final exam	at the end of the	40

Books and References

Course note Contrast Media: types and adverse effect

handbook on contrast media

Essential books Radiographic Contrast Media, Maddox (2002) Am Fam Physician 66(7):1229-34

Knowledge and Skills Matrix

Main Course Contents	Study Week	Knowledge and Understanding	Intellectual Skills	Professional Skills	General Skill
histroy of contrast media	14 weeks				
types of x-ray contrast media					
types of MRI contrast media.					
types of US contrast media					
physical properities of CM					
side effect of contrast media					
general consideration of					
patient selection and					
prepartion					
contrast nephrotoxicity					
metformin and uptake of					
contrast media					
contrast media for children					
contrast media for preganat					
treatment of the sideeffect of					
contrast media					